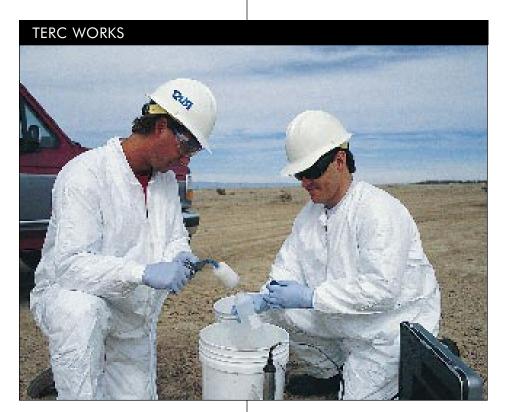
## Rocky Mountain Arsenal

## TOTAL ENVIRONMENTAL RESTORATION CONTRACTS

A SUCCESS STORY



The U.S. Army is remediating the Rocky Mountain Arsenal site for ultimate transfer to the U.S. Fish and Wildlife Service. USACE was tasked to close the Basin F structures, which included three 1.3 million-gallon above-ground storage tanks, two 3.5-acre holding ponds (Pond A and Pond B), a submerged quench incinerator (SQI), and all ancillary piping and containment structures. Closure included complete decontamination and removal of the structures and restoration of the site to a grade compatible with the surrounding area.



Because of the many uncertainties associated with closure of the Basin F structures, USACE selected TERC as the contracting mechanism. Since all decontamination water generated by the project was a listed hazardous waste, it had to be burned in the SQI. Therefore, coordinating the remediation schedule with the SOI operating schedule was critical to ensure both that sufficient wastewater storage was available and that enough wastewater would be generated to keep the SQI operating continuously.

Verification sampling at Rocky Mountain Arsenal.

Coordinating these schedules was difficult; estimates of waste liquid burn times were constantly revised, as were the estimates for wastewater generation. This problem required completion of project design within a short time frame so that decontamination activities could begin as soon as Pond A became available. The TERC contractor met this tight design schedule by setting up a design "war room" and increasing the number of designers. USACE in turn provided "over the shoulder" review to reduce submittal requirements and review times.

Field handling of huge scope increase saved nearly \$1 million. The construction contracts for this work were let as two task orders: one for the pond closure and one for the SQI closure. The task order for pond closure subsequently was modified to include tank closure.

Combining the tank work with the

pond work allowed more flexible use of funds. A potential overrun in one portion of the job could be balanced by underruns in other areas without the need for costly, time-consuming contract modifications.

Because of regulatory concerns with breaching the Pond A cover, design for the decontamination of Pond A was based on data collected during the tank decontamination demonstration project when a layer of hard crystals up to 3 feet thick was encountered.

Once Pond A was made available for decontamination and the cover removed, the amount of crystals discovered in the pond was insignificant. Instead, there was a significant quantity of sludge requiring disposal. Without delaying the project or causing any

Salvage in lieu of disposal saved \$850,000.

down time, the TERC contractor accommodated this changed condition in the field at an increased cost of only 10 percent of the originally estimated \$1 million.

The task order for closure of the SQI was awarded with incomplete information. That approach ensured that the contract was in place when the SQI became available for closure and enabled the TERC contractor to locate a subcontractor who would demolish the structure at a reduced cost. The decision to salvage saved the government \$850,000. Another \$500,000 was saved by managing the task orders concurrently. The flexibility of the TERC contract allowed efficient, cost-effective execution of the project, saved well over \$1 million, and met the customer's tight schedule requirements.



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